

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 9 March 2005 (20050309/ED)

FILE RELOADED: 19 October 2003.

=> ("protamine sulfate" or polylysine or defensin or lysozyme or lactoperoxidase) and a
5311 "PROTAMINE"
594 "PROTAMINES"
5594 "PROTAMINE"
("PROTAMINE" OR "PROTAMINES")
140334 "SULFATE"
4205 "SULFATES"
142239 "SULFATE"
("SULFATE" OR "SULFATES")
1382 "PROTAMINE SULFATE"
("PROTAMINE"(W)"SULFATE")
2197 POLYLYSINE
67 POLYLYSINES
2227 POLYLYSINE
(POLYLYSINE OR POLYLYSINES)
1458 DEFENSIN
1068 DEFENSINS
1885 DEFENSIN
(DEFENSIN OR DEFENSINS)
18477 LYSOZYME
887 LYSOZYMES
18732 LYSOZYME
(LYSOZYME OR LYSOZYMES)
2476 LACTOPEROXIDASE
9 LACTOPEROXIDASES
2476 LACTOPEROXIDASE
(LACTOPEROXIDASE OR LACTOPEROXIDASES)
40578 ANTIMICROBIAL
3842 ANTIMICROBIALS
42434 ANTIMICROBIAL
(ANTIMICROBIAL OR ANTIMICROBIALS)
4531 MALEIMIDE
212 MALEIMIDES
4655 MALEIMIDE
(MALEIMIDE OR MALEIMIDES)
L2 1 ("PROTAMINE SULFATE" OR POLYLYSINE OR DEFENSIN OR LYSOZYME
LACTOPEROXIDASE) AND ANTIMICROBIAL AND MALEIMIDE

=> d ti

L2 ANSWER 1 OF 1 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on S
TI LACTO PEROXIDASE CATALYZED INCORPORATION OF THIO CYANATE ION
PROTEIN SUBSTRATE.

=> d ab bib

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AB ***Lactoperoxidase*** [bovine milk] catalyzed the peroxide-dependent
incorporation of thiocyanate ion into a protein substrate. This activity
was studied as a model for the peroxidase-dependent antithyroid and
antimicrobial action of thiocyanate. Two types of incorporation
were observed. When the amount of peroxide added did not exceed the
amount of protein sulfhydryls, the S and C portions of thiocyanate were
incorporated in a one-to-one ratio. This type of incorporation was
eliminated when protein sulfhydryls were blocked by reaction with
N-ethylmaleimide. These results indicated incorporation of the intact
thiocyanate moiety into a derivative of cysteine residues. Incubation
with a sulfhydryl compound such as dithiothreitol resulted in release of
the bound thiocyanate moiety. A 2nd form of incorporation was observed
when peroxide exceeded protein sulfhydryls. Incorporation of C exceeded
that of S. Blocking of protein sulfhydryls or addition of a sulfhydryl
compound had no effect on this form of incorporation. Studies using amino
acid and poly(amino acid) substrates indicated that modification of
tyrosine, tryptophan and histidine residues accounted for this
incorporation. Similar modification of protein sulfhydryls and aromatic
amino acids was obtained with the thiocyanate analogue of the halogens,